



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,863	09/28/2005	Tadayoshi Sato	SAT-45	2999
20311 7590 12/03/2009 LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016				
EXAMINER KURTZ, BENJAMIN M				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
12/03/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

info@lmiplaw.com

### Office Action Summary

**Application No.**

10/524,863

**Applicant(s)**

SATO, TADAYOSHI

**Examiner**

BENJAMIN KURTZ

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2009.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 5-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 28 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Claims 5-11 are pending, claims 1-4 are cancelled.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 1. Claims 5, 7, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly US 1 164 527, Cantrell US 2003/0033670, and Lynch US 4 333 835.**

Claim 5, Kelly teaches a sink comprising: a basin (the garage or shop) having side walls and a bottom wall (the floor), with an opening in the bottom wall, a separation vessel formed underneath the basin, the separation vessel having downwardly extending sidewalls that extend in a continuous manner directly vertically downward from the opening and are commensurate with a perimeter of the opening, the separation vessel communicating with the basin via the opening (B), the separation vessel forming vertically a first part of a letter U-shaped passage which begins at the opening, a water storage vessel (H) forming a second part of the letter U-shaped passage which begins

at the opening as a whole together with the separation vessel, a draining means (K), and an open/close means (D3) provided at a side of the separation vessel (fig. 1). How the apparatus functions is a process limitation that does not add structural limitations to the claim. Kelly the open/close means located at the predetermined water level.

Lynch teaches a separation vessel (32), a water storage vessel (34) forming a U-shaped passage as a whole together with the separation vessel and storing wastewater from the separation vessel up to a predetermined water level (104), a means (90) provided in a place located at the predetermined water level for recovering oil content (fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the open/close means of Kelly at the predetermined water level as taught by Lynch because the oil collects in the separation vessel and rises to the top and provides the true liquid level at the predetermined water level (col. 6, lines 15-20). Moving the location of the open/close means is a simple rearrangement of parts into a known configuration as taught in the prior art. Shifting the position of an element is unpatentable if shifting the position of the element would not modify the operation of the device, *In re Japikse*, 86 USPQ 70 (1950). Shifting the position of the open/close means of Kelly would not modify the operation of the device of Kelly as the open/close means would still be capable of drawing off the lighter oils. Also, the claim would have been obvious because the particular known technique of positioning the oil collector was recognized as part of the ordinary capabilities of one skilled in the art, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

Cantrell teaches a sink comprising: a basin (50) having side walls and a bottom wall with an opening in the bottom wall and a separation vessel (60) underneath the basin extended continuously from the opening, the separation vessel communicating with the basin via the opening (fig. 7). While Kelly already teaches placing a separation vessel below a basin it is also known in the prior art to use oil water separators in conjunction with sinks or basins used in restaurants as shown by Cantrell. The claim would have been obvious because the substitution of one known element (grease trap of Kelly) for another (the grease trap of Cantrell) would have yielded predictable results to one of ordinary skill in the art at the time of the invention, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007). The separator taught by Kelly would lead one of ordinary skill in the art to place the separator directly beneath the drain of Cantrell in the same configuration claimed herein.

Regarding claim 7, Kelly further teaches the separation vessel and the water storage vessel have a common partition member (F) forming the u-shaped passage, and the draining means (K) has a structure with an inlet formed at a position of the predetermined fluid level on a circumferential side wall of the water storage vessel and a pipe shaped member formed out so as to connect the inlet and outside of the water storage vessel (fig. 1).

Regarding claim 8, Kelly further teaches the separation vessel and the water storage vessel have a common partition member (F) forming the u-shaped passage, and the draining means (K) has an inlet formed at a position of the predetermined fluid

level within the water storage vessel and a pipe shaped member formed out so as to connect the inlet and outside of the water storage vessel (fig. 1).

Claim 10, Kelly teaches a sink comprising: a basin (the garage or shop) having side walls, a front wall and a back wall and a bottom wall (the floor), with an opening in the bottom wall, a separation vessel formed underneath the basin, the separation vessel having downwardly extending sidewalls that extend in a continuous manner directly vertically downward from the opening and are commensurate with a perimeter formed by the opening, the separation vessel (D) having two sides and a front wall and a back wall, a water storage vessel (H) underneath the basin, horizontally adjacent and in fluid communicating with the separation vessel in a form of a U-shaped water passage which begins at the opening, a draining means (K) connected to the water storage vessel at a place with a height of a predetermined water level and an open/close means (D3) provided at the wall of the separation vessel (fig. 1). Kelly does not teach an oblong opening in the bottom wall, the separation vessel being made of the same piece of material as the side walls and front and back wall of the basin, or the open/close means located at the predetermined water level.

Lynch teaches a separation vessel (32), a water storage vessel (34) forming a U-shaped passage as a whole together with the separation vessel and storing wastewater from the separation vessel up to a predetermined water level (104), a means (90) provided in a place located at the predetermined water level for recovering oil content (fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the open/close means of Kelly at the predetermined

water level as taught by Lynch because the oil collects in the separation vessel and rises to the top and provides the true liquid level at the predetermined water level (col. 6, lines 15-20). Moving the location of the open/close means is a simple rearrangement of parts into a known configuration as taught in the prior art. Shifting the position of an element is unpatentable if shifting the position of the element would not modify the operation of the device, *In re Japikse*, 86 USPQ 70 (1950). Shifting the position of the open/close means of Kelly would not modify the operation of the device of Kelly as the open/close means would still be capable of drawing off the lighter oils. Also, the claim would have been obvious because the particular known technique of positioning the oil collector was recognized as part of the ordinary capabilities of one skilled in the art, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

Cantrell teaches a sink comprising: a basin (50) having side walls and a bottom wall with an opening in the bottom wall and a separation vessel (60) underneath the basin extended continuously from the opening, the separation vessel communicating with the basin via the opening (fig. 7). While Kelly already teaches placing a separation vessel below a basin it is also known in the prior art to use oil water separators in conjunction with sinks or basins used in restaurants as shown by Cantrell. The claim would have been obvious because the substitution of one known element (grease trap of Kelly) for another (the grease trap of Cantrell) would have yielded predictable results to one of ordinary skill in the art at the time of the invention, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007). The separator taught by Kelly would lead one of

ordinary skill in the art to place the separator directly beneath the drain of Cantrell in the same configuration claimed herein.

Neither Kelly nor Cantrell teach the opening being oblong. The claimed limitation is merely a change in the shape of the opening. The configuration of the apparatus is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant, *In re Dailey*, 149 USPQ 47 (1966).

The recitation of the separation vessel being formed by the same piece of material as the two side walls of the basin and a front wall and a back wall formed by the same piece of material as the front wall and back wall of the basin bent vertically downward at the opening is merely a recitation of the making the basin and the separation vessel an integral unit instead of separately assembled pieces. [T]he use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice; *In re Larson* 144 USPQ 23 1952.

Claim 11, Kelly teaches a sink comprising: a basin ((the garage or shop) having side walls and a bottom wall (the floor), with an opening in the bottom wall, a separation vessel formed underneath the basin, the separation vessel having downwardly extending sidewalls that extend in a continuous manner directly vertically downward from the opening and are commensurate with a perimeter of the opening, the separation vessel forming vertically half of a letter U-shaped passage which begins at the opening, a total oil recovering system comprising a draining means (K) in the water storage vessel at a height of a predetermined water level and an open/close means (D3) on a



side of the separation vessel (fig. 1). Kelly does not teach the open/close means at the same height as the draining means.

Lynch teaches a separation vessel (32), a water storage vessel (34) forming a U-shaped passage as a whole together with the separation vessel and storing wastewater from the separation vessel up to a predetermined water level (104), a means (90) provided in a place located at the predetermined water level for recovering oil content (fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the open/close means of Kelly at the predetermined water level as taught by Lynch because the oil collects in the separation vessel and rises to the top and provides the true liquid level at the predetermined water level (col. 6, lines 15-20). Moving the location of the open/close means is a simple rearrangement of parts into a known configuration as taught in the prior art. Shifting the position of an element is unpatentable if shifting the position of the element would not modify the operation of the device, *In re Japikse*, 86 USPQ 70 (1950). Shifting the position of the open/close means of Kelly would not modify the operation of the device of Kelly as the open/close means would still be capable of drawing off the lighter oils. Also, the claim would have been obvious because the particular known technique of positioning the oil collector was recognized as part of the ordinary capabilities of one skilled in the art, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

Cantrell teaches a sink comprising: a basin (50) having side walls and a bottom wall with an opening in the bottom wall and a separation vessel (60) underneath the basin extended continuously from the opening, the separation vessel communicating

Art Unit: 1797

with the basin via the opening (fig. 7). While Kelly already teaches placing a separation vessel below a basin it is also known in the prior art to use oil water separators in conjunction with sinks or basins used in restaurants as shown by Cantrell. The claim would have been obvious because the substitution of one known element (grease trap of Kelly) for another (the grease trap of Cantrell) would have yielded predictable results to one of ordinary skill in the art at the time of the invention, KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (2007). The separator taught by Kelly would lead one of ordinary skill in the art to place the separator directly beneath the drain of Cantrell in the same configuration claimed herein.

**2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly '527, Cantrell '670, and Lynch '835 as applied to claim 5 above, and further in view of Maranville US 911 314.**

Regarding claim 6, Kelly, Cantrell and Lynch teach the sink of claim 5 but do not teach a buffer vessel. Maranville teaches a sink comprising: a separation vessel (2), a water storage vessel (3) forming a u-shaped passage together with the separation vessel, a draining means (9), and a buffer vessel (formed by element (10)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the buffer vessel as taught by Maranville because the buffer vessel maintains a constant head of water in the water storage vessel that is independent of the rate of flow

Art Unit: 1797

through the outlet thereby preventing accidental escape of water through the oil discharge (pg. 2 lines 27-44).

None of Kelly, Cantrell, Lynch or Maranville teaches a buffer vessel formed between the separation vessel and the water storage vessel. Placing the buffer vessel between the separation vessel and water storage vessel is merely a rearrangement of the buffer vessel and the outlet that would not affect the operation of the apparatus and would have been obvious to one of ordinary skill in the art. Shifting the position of an element is unpatentable if shifting the position of the element would not modify the operation of the device, *In re Japikse*, 86 USPQ 70 (1950).

**3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly '527, Cantrell '670, and Lynch '835 as applied to claim 5 above, and further in view of Broughton US 4 396 508 or Hirshstein US 2 284 737.**

Kelly, Cantrell and Lynch teach the sink of claim 5 but do not teach a second means for opening and closing the separation vessel provided in a front lower part of the separation vessel. Broughton and Hirshstein both teach oil-water separators having a means for opening and closing the separation vessel (Broughton (28) fig. 1, Hirshstein (29) fig. 1) provided in a front lower part of the separation vessel for depleting sedimentary garbage in the vessel at a position below a predetermined water level. It is assumed applicant is invoking 112 6<sup>th</sup> paragraph. The means for opening and closing the separation vessel as taught by Broughton and Hirshstein performs the same

function in substantially the same with substantially the same results as the open/close cock disclosed herein. The claim would have been obvious because the technique for improving a particular class of devices was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the teaching of the technique for improvement in other situations, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

### ***Response to Arguments***

4. Applicant's arguments filed 9/28/09 have been fully considered but they are not persuasive.

Applicant's arguments regarding the amendments made to the claims are addressed in the body of the rejection above.

Applicant argues that the position of the upper and lower open/close means is distinguishable from the prior art. Kelly teaches the use of an upper open/close means and Lynch teaches where to place the open/close means. Broughton and Hirshstein both teach lower open/close means and it is obvious to use such a feature as detailed in the rejection above.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN KURTZ whose telephone number is (571)272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin Kurtz  
Examiner  
Art Unit 1797

/Krishnan S Menon/  
Primary Examiner, Art Unit 1797